

In the Claims

1. (Currently Amended) An optomechanical switch for transmitting an optical beam comprising:

a substrate;

a signal-light source capable of transmitting a radiation signal; and

a light (or laser) movable liquid crystal (LMLC) on said substrate positionable between a first position and a second position upon activation with said signal-light source.

2. (Original) The optomechanical switch of claim 1 wherein said first position is a transmissive state for transmission of said optical beam.

3. (Original) The optomechanical switch of claim 2 wherein said second position is a reflective state for reflection of said optical beam.

4. (Original) The optomechanical switch of claim 1 wherein said substrate is silicon.

5. (Original) The optomechanical switch of claim 1 wherein said substrate is silicon on insulator.

6. (Original) The optomechanical switch of claim 1 wherein said substrate is a multi layer substrate.

7. (Currently Amended) The optomechanical switch of claim 1 wherein said signal-light source is a laser.

8. (Canceled)

9. (Currently Amended) An optomechanical switch for transmitting an optical beam comprising~~The optomechanical switch of claim 1 further comprising:~~

a substrate;

a signal source capable of transmitting a radiation signal;

a light movable liquid crystal on said substrate positionable between a first position and a second position upon activation with said signal source

a micromirror disposed perpendicularly to the plane of hinged to said LMLC.

10. (Canceled)

11. (Currently Amended) The optomechanical switch of claim ~~10~~ 9 wherein said hinge is made of LMLCs.

12. (Original) The optomechanical switch of claim 1 wherein said LMLC is rotatably disposed with respect to said substrate.

13. (New) The optomechanical switch of claim 9 wherein said first position is a transmissive state for transmission of said optical beam.

14. (New) The optomechanical switch of claim 13 wherein said second position is a reflective state for reflection of said optical beam.

15. (New) The optomechanical switch of claim 9 wherein said signal source is a light source.

16. (New) The optomechanical switch of claim 9 wherein said signal source is a laser source.